AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of processing speech information in a communication network in which pieces of speech information are transmitted in packets or slots or frames, the method comprising:

performing plural subfunctions, each of the subfunctions having different priority and differently influencing quality of the transmitted information with different degrees of severity or importance;

for a given instant and for a piece of information, calculating a measure of total processing required;

comparing the measure of total processing required to total processing capability for handling the transmitted information at the given instant;

when the total processing required exceeds the total processing capability, performing a subset of the plural subfunctions on a priority basis.

2. (Previously Presented) A method according to claim 1, further comprising performing, as the subset, certain subfunctions which influence the transmitted information with a low degree of severity or a high degree of importance.

3. (Currently Amended) A method according to claim 2, further comprising for the given instant calculating the processing required by the subset of subfunctions; ~~and,~~

determining processing capability remaining after performing the subset; and

performing subfunctions different from the subset according to the calculated remaining processing capability.

4. (Previously Presented) A method according to claim 1, further comprising:

sending the information in the network in a plurality of parallel channels having different priority levels;

processing the information in each channel;

at the given instant calculating the measure of the total processing required for all of the parallel channels;

comparing the total processing required for all of the parallel channels to the total processing capability; and

when the required processing required exceeds the total processing capability, performing more subfunctions for channels having a high priority level than for channels having a low priority level.

5. (Previously Presented) A method according to claim 1, wherein the plural subfunctions comprise an echo cancellation algorithm.

6. (Previously Presented) A method according to claim 5, wherein the echo cancellation algorithm function is divided into at least one of the following subfunctions: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

7. (Previously Presented) A method according to claim 6, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

8. (Previously Presented) A method according to claim 4, further comprising, for the given instant, always performing preselected ones of the subfunctions for each

channel, the preselected ones of the subfunctions being selected to require processing not exceeding the total processing capability.

9. (Previously Presented) A method according to claim 8, further comprising performing, for the given instant, remaining subfunctions not included in the preselected subfunctions in accordance with total processing left after performing the preselected ones of the subfunctions.

10. (Previously Presented) A method according to claim 1, further comprising determining the processing required by each of the subfunctions as a number of processor instructions used by the subfunction.

11. (Previously Presented) A method according to claim 4, further comprising basing a number of parallel channels in which information is sent in the communication network on an average of the processing required.

12. (Previously Presented) A method of processing speech information in a communication network in which pieces of speech information are transmitted in pieces in packets or slots or frames, the information in the network being sent in a plurality of parallel channels having different priority levels, the method comprising:

making calculations according to an algorithm, the algorithm comprising plural subfunctions,

for a given instant and for a piece of information, calculating a measure of total processing required for all of the channels;

comparing the measure of total processing required for all of the channels to total processing capability for handling the transmitted information at the given instant;

when the total processing required exceeds the total processing capability, performing more of the subfunctions for channels having a high priority level than for channels having a low priority level.

13. (Previously Presented) A method according to claim 12, wherein each of the subfunctions influence the quality of the transmitted information with different degrees of severity or importance, and when the total processing required exceeds the total processing capability,, performing, for channels having a low priority level, only those of the subfunctions which influence the transmitted information with a low degree of severity or a high degree of importance.

14. (Previously Presented) A method according to claim 12, wherein the plural subfunctions comprise an echo cancellation algorithm.

15. (Previously Presented) A method according to claim 14, wherein the echo cancellation algorithm function is divided into at least one of the following subfunctions: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

16. (Previously Presented) A method according to claim 15, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

17. (Previously Presented) A method according to claim 12, further comprising, for the given instant, always performing preselected ones of the subfunctions for each channel, the preselected ones of the subfunctions being selected to require processing not exceeding the total processing capability.

18. (Previously Presented) A method according to claim 17, further comprising performing, for the given instant, remaining subfunctions not included in the preselected subfunctions in accordance with total processing left after performing the preselected ones of the subfunctions.

19. (Previously Presented) A method according to claim 12, further comprising determining the processing required by each of the subfunctions as a number of processor instructions used by the subfunction.

20. (Previously Presented) A method according to claim 12, further comprising basing a number of parallel channels in which information is sent in the communication network on an average of the processing required.

21. (Previously Presented) A method of processing speech information in a communication network in which pieces of speech information are transmitted in pieces in packets or slots or frames, the information in the network being sent in a plurality of parallel channels having different priority levels, the method comprising:

making calculations according to an algorithm, the algorithm comprising plural subfunctions;

for a given instant and for a piece of information, calculating a measure of total processing required for all of the channels;

comparing measure of total processing required for all of the channels to the total processing capability for handling the transmitted information at the given instant;

when the total processing required exceeds the total processing capability, performing some of the subfunctions for the channels in accordance with a round robin scheme.

22. (Previously Presented) A method according to claim 21, wherein the plural subfunctions comprise an echo cancellation algorithm.

23. (Previously Presented) A method according to claim 22, wherein the echo cancellation algorithm function is divided into at least one of the following subfunctions: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

24. (Previously Presented) A method according to claim 23, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

25. (Previously Presented) A method according to claim 21, further comprising, for the given instant, always performing preselected ones of the subfunctions for each channel, the preselected ones of the subfunctions being selected to require processing not exceeding the total processing capability.

26. (Previously Presented) A method according to claim 25, further comprising performing, for the given instant, remaining subfunctions not included in the preselected subfunctions in accordance with total processing left after performing the preselected ones of the subfunctions.

27. (Previously Presented) A method according to claim 21, further comprising determining the processing required by each of the subfunctions as a number of processor instructions used by the subfunction.

28. (Previously Presented) A method according to claim 27, further comprising basing a number of parallel channels in which information is sent in the communication network on an average of the processing required.

29. (Previously Presented) A processor for processing speech information sent as pieces of transmitted information in packets or slots or frames, the processor comprising:

calculating means for making calculations according to an algorithm comprising plural subfunctions, the calculation means comprising calculation modules, each calculation module adapted to perform an individual one of the subfunctions, each of the subfunctions having different priority and differently influencing quality of the transmitted information;

control means for determining, at a given instant and for a piece of information, a measure of total processing by the processor required and for comparing the measure to the total processing capability of the processor for handling the transmitted information, and for selecting, in the case where the total processing required exceeds the total processing capability, calculation modules which perform subfunctions that influence the transmitted information with a low degree of severity or a high degree of importance, the calculation modules not selected being inactive at the given instant and thereby not performing their subfunctions.

30. (Previously Presented) A processor according to claim 29, wherein the control means are arranged to select for the given instant only calculation modules performing preselected ones of the subfunctions, the preselected ones influencing the transmitted information with a low degree of severity or a high degree of importance.

31. (Previously Presented) A processor according to claim 30, wherein the control means are arranged to calculate for the given instant the processing required by the preselected subfunctions and to determine the processing capability of the processor

remaining after performing the preselected subfunctions and to activate calculation modules performing subfunctions differing from the preselected subfunctions, the activation being made according to the calculated remaining processing capability.

32. (Previously Presented) A processor according to claim 29, wherein when the information in the network is sent in a plurality of parallel channels having different priority levels, wherein the processor is arranged to process the information in each of the channels and to calculate for the given instant the measure of the total processing required for all of the parallel channels and comparing the measure, and when the measure of the required processing required is found to exceed the total processing capability, to activate more calculating modules performing subfunctions for information sent in channels having a high priority level than for information sent in channels having a low priority level.

33. (Original) A processor according to claim 29, wherein the calculation means are arranged to perform an echo cancellation algorithm.

34. (Original) A processor according to claim 33, wherein the calculating modules are arranged to perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

35. (Previously Presented) A processor according to claim 34, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

36. (Previously Presented) A processor according to claim 32, wherein the control means are arranged to activate for the given instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

37. (Previously Presented) A processor according to claim 36, wherein the control means are arranged to activate for the given instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the subfunctions.

38. (Original) A processor according to claim 29, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

39. (Original) A processor according to claim 32. wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.

40. (Previously Presented) A processor for processing speech information sent as pieces of transmitted information in packets or slots or frames in a communication network, the information in the network being sent in a plurality of parallel channels having different priority levels, the processor comprising:

calculating means for making calculations according to an algorithm comprising plural subfunctions of differing priority and differing subfunctionality, the calculation means comprising calculation modules, each calculation module adapted to perform an individual one of the subfunctions;

control means for determining, for a given instant and for a piece of information, a measure of total processing by the processor required for all of the channels at the given instant and for comparing the measure to total processing capability of the processor for handling the transmitted information, and for activating, when the total processing required exceeds the total processing capability, more calculating modules performing subfunctions for information sent in channels having a high priority level than for information sent in channels having a low priority level.

41. (Previously Presented) A processor according to claim 40, wherein the calculating modules are arranged to perform subfunctions which influence quality of the information sent with differing degrees of severity or importance, and that the control means are arranged to activate, when the total processing required exceeds the total processing capability, for channels having a low priority level, only those of the calculating modules which perform subfunctions that influence the information sent with a low degree of severity or a high degree of importance.

42. (Original) A processor according to claim 40, wherein the calculation means are arranged to perform an echo cancellation algorithm.

43. (Original) A processor according to claim 42, wherein the calculating modules are arranged to perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

44. (Previously Presented) A processor according to claim 43, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

45. (Previously Presented) A processor according to claim 40, wherein the control means are arranged to activate for the given instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

46. (Previously Presented) A processor according to claim 45, wherein the control means are arranged to activate for the given instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the subfunctions.

47. (Original) A processor according to claim 40, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

48. (Original) A processor according to claim 40, wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.

49. (Previously Presented) A processor for processing speech informationsent as pieces of speech information in packets or slots or frames in a communication network, the information in the network being sent in a plurality of parallel channels having different priority levels, the processor comprising:

calculating means for making calculations according to an algorithm comprising plural subfunctions of differing priority and differing subfunctionality, the calculation

means comprising calculation modules, each calculation module adapted to perform an individual one of the subfunctions;

control means for determining, at a given instant and for a piece of information, a measure of total processing by the processor required for all of the channels at the given instant and for comparing the measure to total processing capability of the processor for handling the transmitted information, and for activating, when the total processing required is found to exceed the total processing capability, some of the calculating modules performing subfunctions for the channels in accordance with a round robin scheme for the channels.

50. (Original) A processor according to claim 49, wherein the calculation means are arranged to perform an echo cancellation algorithm.

51. (Previously Presented) A processor according to claim 50, wherein the calculating modules are arranged to perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

52. (Previously Presented) A processor according to claim 51, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales, respectively.

53. (Previously Presented) A processor according to claim 49, wherein the control means are arranged to activate for the given instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

54. (Previously Presented) A processor according to claim 53, wherein the control means are arranged to activate for the given instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the sub functions.

55. (Original) A processor according to claims 49, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

56. (Original) A processor according to claim 49, wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.

57. (Previously Presented) An echo canceller which receives pieces of speech information transmitted as packets or slots or frames, the echo canceller comprising a processor which is configured to make a determination whether an amount of processing required at a given instant for performing echo cancellation exceeds a total processing capability of the processor for handling echo cancellation and, in dependence on the determination, to execute a subset of plural potential echo cancellation subfunctions, with each of the subfunctions having differing subfunctionality and differently influencing the echo cancellation.

58. (Previously Presented) The echo canceller of claim 57, wherein the plural potential echo cancellation subfunctions include at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

59. (Previously Presented) The echo canceller of claim 58, wherein the plural potential echo cancellation subfunctions are prioritized in the following order: filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing.

60. (Previously Presented) An executable program stored in a memory which, when executed by a processor, performs steps of:

making a determination whether an amount of processing required at a given instant for performing speech signal processing exceeds a total processing capability of the processor for handling the speech signal processing;

in accordance with the determination, invoking a subset of potential plural speech signal processing subfunctions, with each of the subfunctions having differing subfunctionality and differently influencing the speech signal processing, thereby determining a number of speech signal processing subfunctions to be allocated to a speech signal processing task in accordance with load on the processor.

61. (Previously Presented) The executable program of claim 60, wherein the speech signal processing is echo cancellation or transcoding.